Knowledgebase Article

Prerequisites of Wake On LAN

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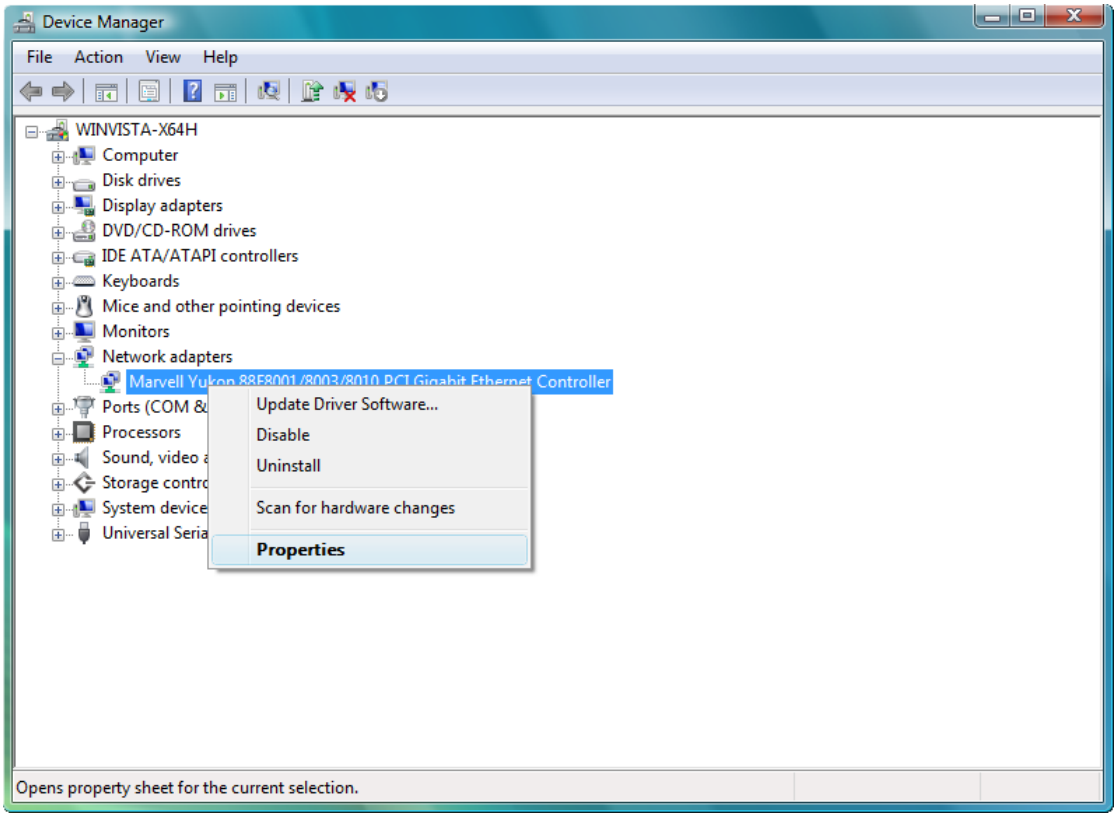
Prerequisites of Wake-On-LAN

Wake on LAN (WoL) support is implemented on the motherboard of a Machine. Most modern motherboards with an embedded Ethernet controller support WoL without the need for an external cable. Older motherboards must have a WAKEUP-LINK header on board and connected to the network card via a special 3-pin cable; however, systems supporting the PCI 2.2 standard coupled with a PCI 2.2 compliant network adapter typically do not require a WoL cable as the required standby power is relayed through the PCI bus.

You can use Wake-On-LAN with Professional edition

To use WoL feature it is required to configure the target Machine in the following way:

1. Wake on LAN must be enabled in the Power Management section of the motherboard's BIOS. WoL enablement item name can differ according to the BIOS manufacturer (Power On by LAN, Wake On LAN, Power on by PCI Devices or Power on by PCIE Devices). To get the detailed information on how to enable WoL in the BIOS of your motherboard please refer to Motherboard User Manual or to the system manufacturer.
2. Wake on LAN must be enabled in the Network Adapter settings. This can be done from the properties of the network adapter in the device manager.
    1. Open Device Manager.
    2. In the window opened expand the Network adapters node.
    3. Select the adapter you want to configure to receive WoL packages, click on it with the right mouse button and click the Properties item in the drop-down menu.



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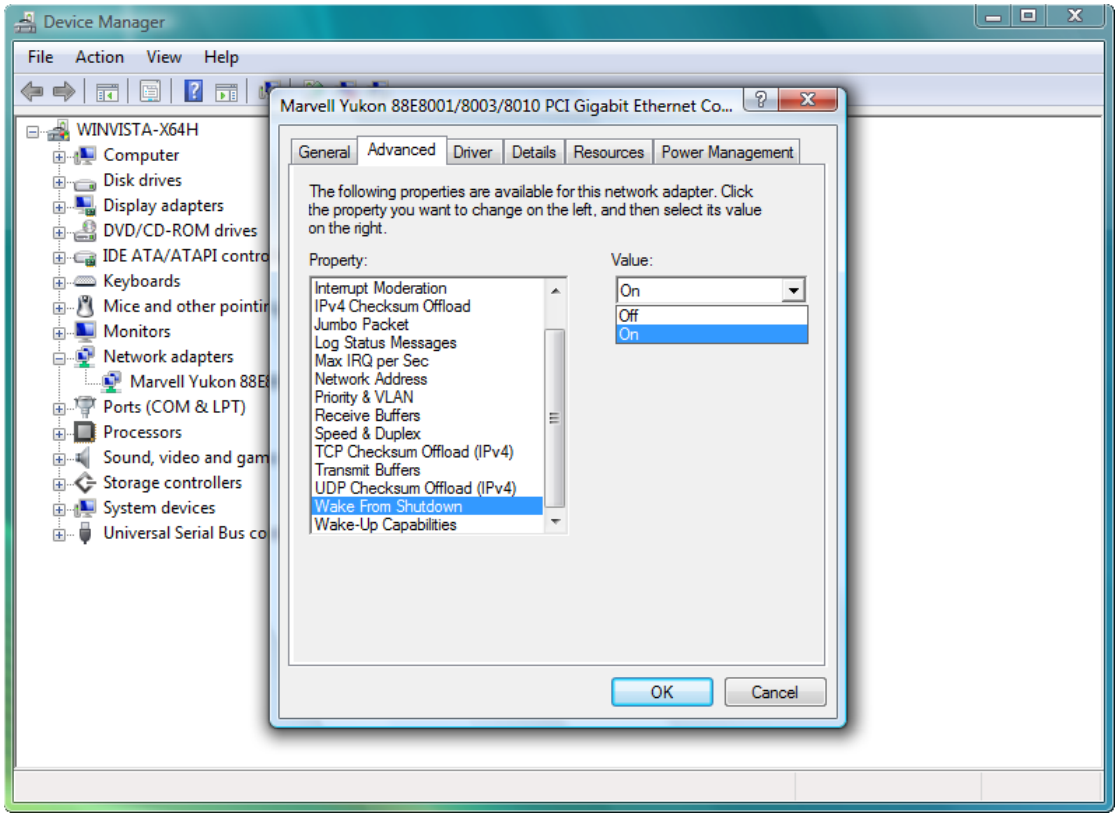
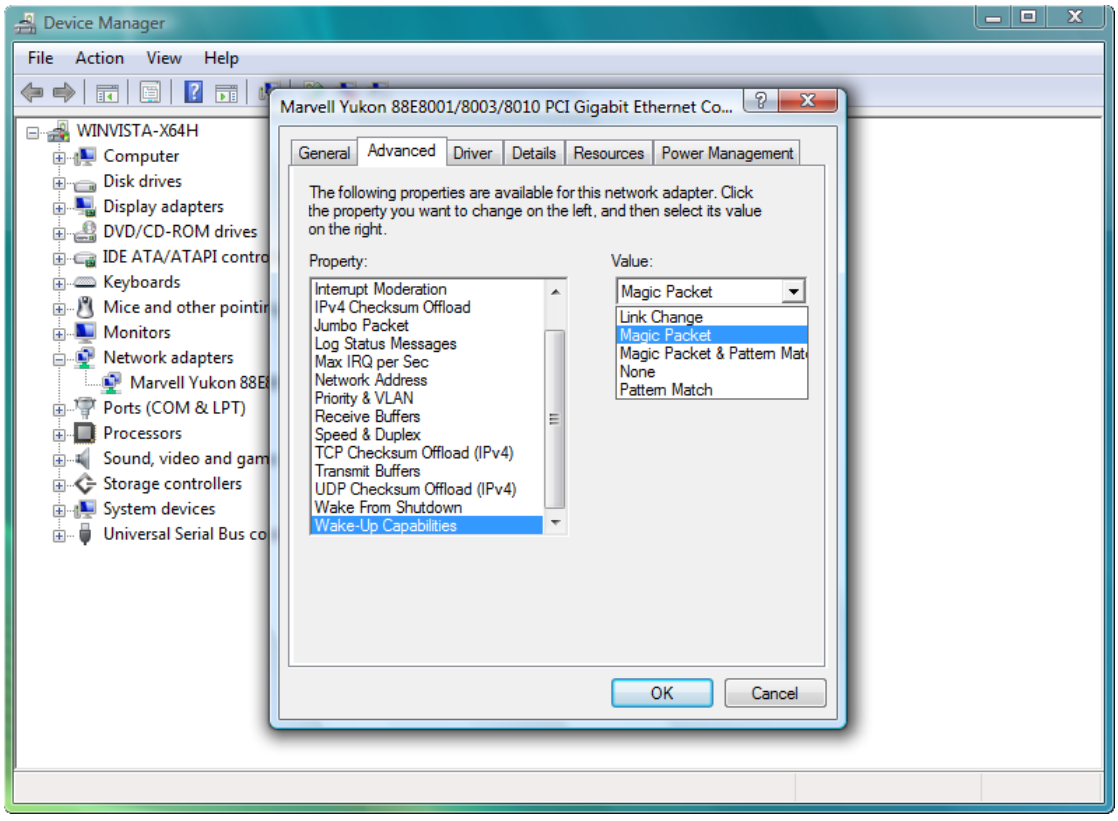
4. In the dialog opened switch to the Advanced tab.
5. Change Wake from shutdown property to on.



6. For Wake-up capabilities property choose magic packet value.



7. Press OK button to proceed.

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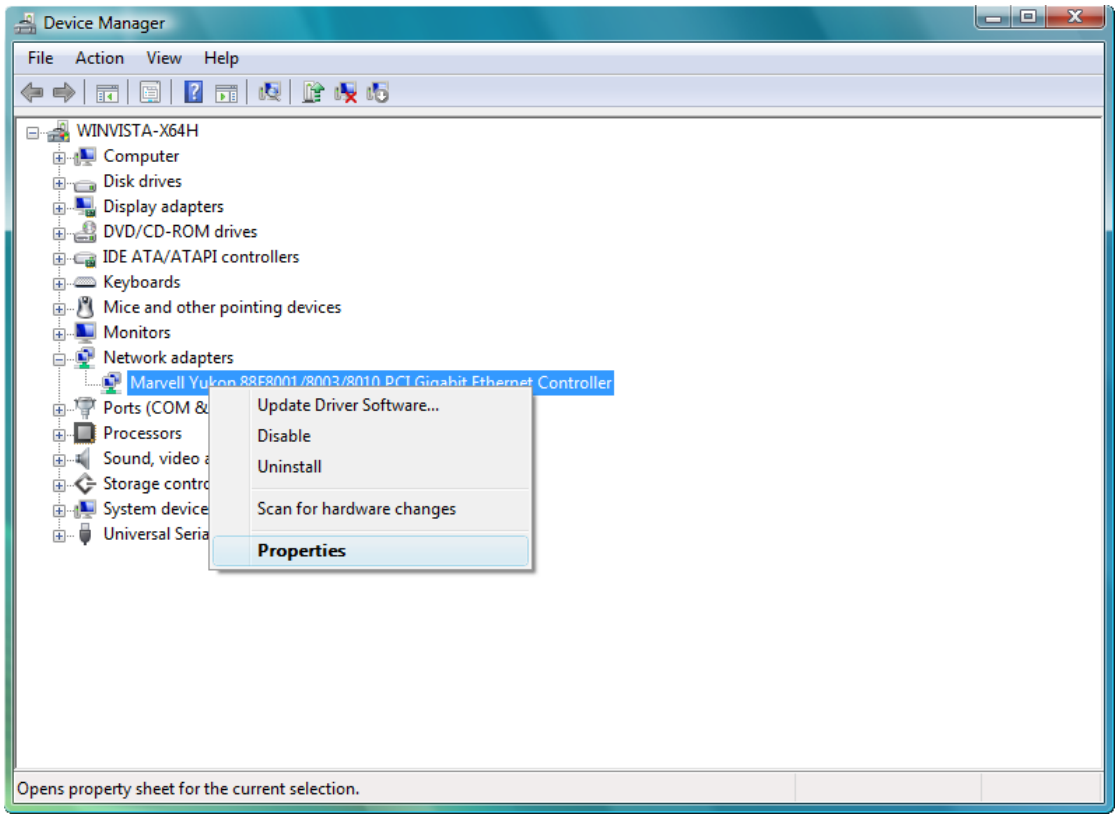
3. The target Machine must be in Shut Down state (that means that the AC adapter was not turned of after the last Shut Down). If you want to wake the Machines up from Sleep or Hibernate you must set up some additional Network Adapter settings:
   1. Open Device Manager.
   2. In the window opened expand the Network adapters node.
   3. Select the adapter you want to configure to receive WoL packages, click on it with the right mouse button and click the 4. Properties item in the drop-down menu.
   4. In the dialog opened switch to the Power Management tab.



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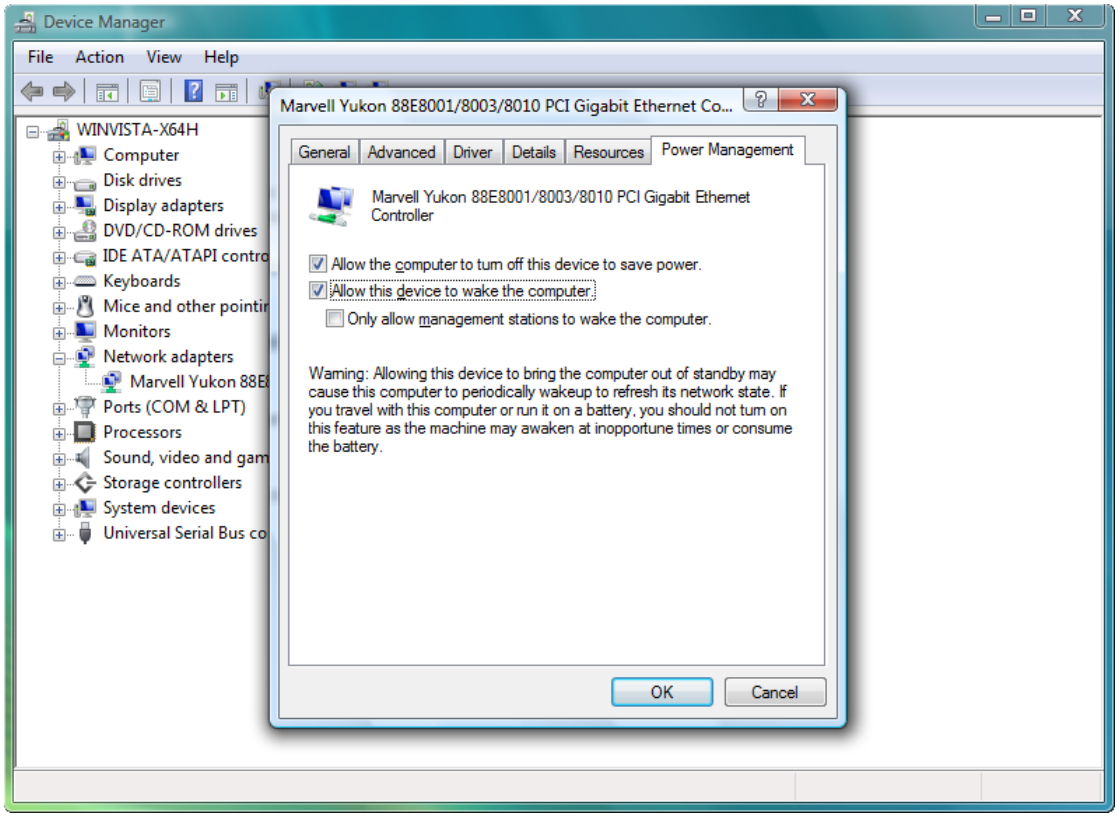
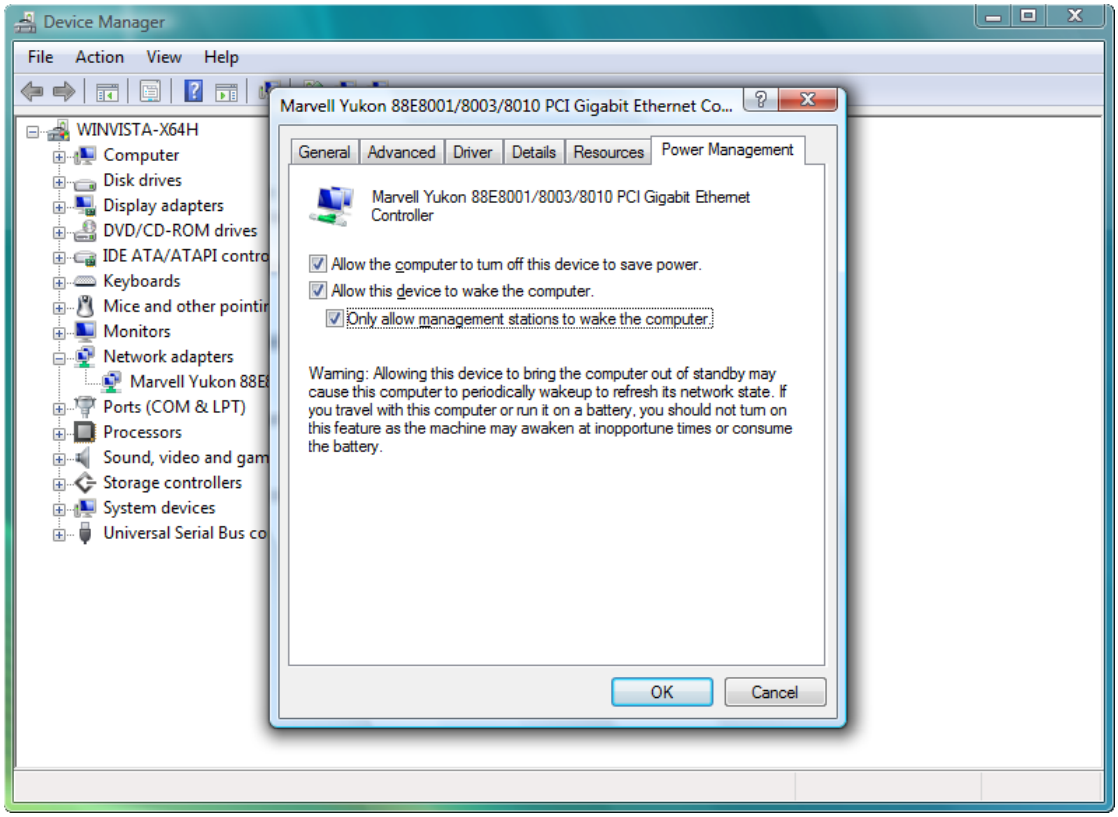
5. Check Allow this device to wake the computer option.


Device Manager
File Action View Help
WINVISTA-X64H
Computer
Disk drives
Display adapters
DVD/CD-ROM drives
IDE ATA/ATAPI contro
Keyboards
Mice and other pointir
Monitors
Network adapters
Marvell Yukon 88E
Ports (COM & LPT)
Processors
Sound, video and gam
Storage controllers
System devices
Universal Serial Bus co
Marvell Yukon 88E8001/8003/8010 PCI Gigabit Ethernet Co...
General Advanced Driver Details Resources Power Management
Marvell Yukon 88E8001/8003/8010 PCI Gigabit Ethernet Controller
Allow the computer to turn off this device to save power.
Allow this device to wake the computer.
Only allow management stations to wake the computer.
Warning: Allowing this device to bring the computer out of standby may cause this computer to periodically wakeup to refresh its network state. If you travel with this computer or run it on a battery, you should not turn on this feature as the machine may awaken at inopportune times or consume the battery.
OK
Cancel

6. Check Only allow management stations to wake the computer option to make sure it does not wake up on every single network activity that occurs.


Device Manager
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WINVISTA-X64H
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Network adapters
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Ports (COM & LPT)
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Storage controllers
System devices
Universal Serial Bus co
Marvell Yukon 88E8001/8003/8010 PCI Gigabit Ethernet Co...
General Advanced Driver Details Resources Power Management
Marvell Yukon 88E8001/8003/8010 PCI Gigabit Ethernet Controller
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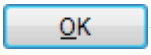
OK
Cancel

7. Press 

button to proceed.

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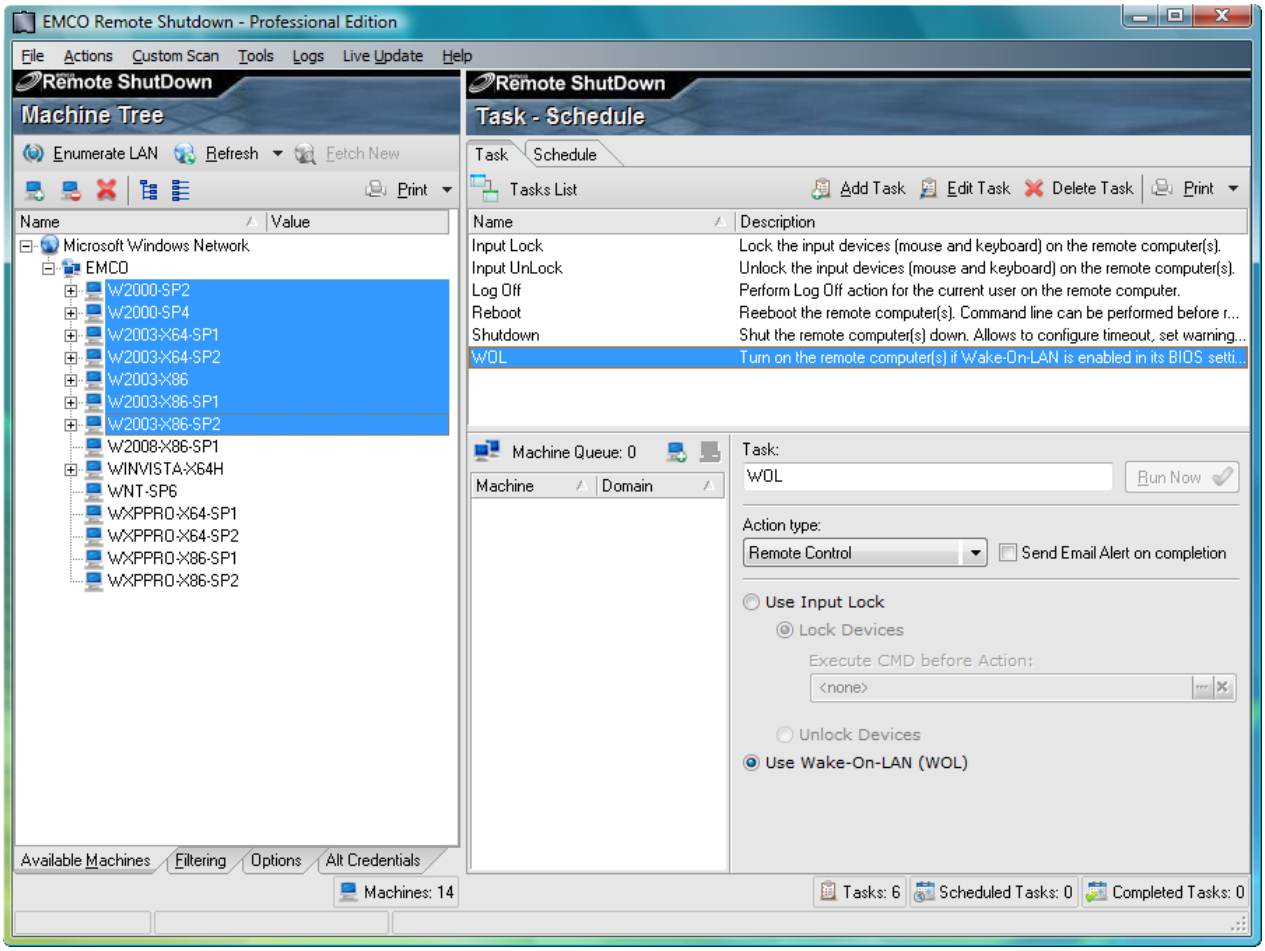
Use Wake-On-LAN

EMCO Remote Shutdown allows you to use Wake-On-LAN in two different ways:

Way I

To enable Wake-On-LAN on remote machine perform the following steps:

1. Press the Ctrl key, keep it pressed and select the machines that you what to process in the Machine Tree in Available Machines tab.



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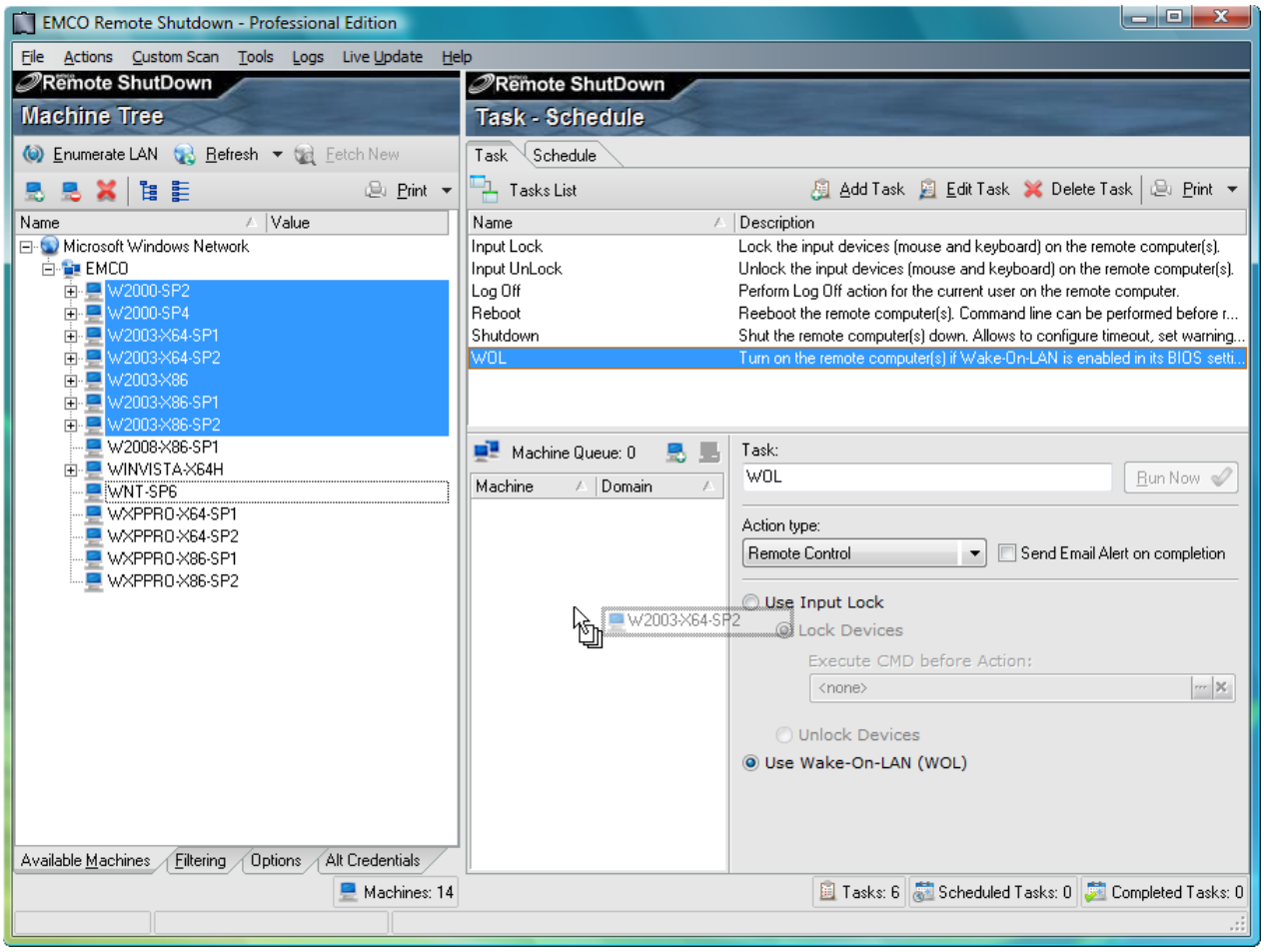
2. Switch to the Task tab.
3. Click any of the selected machines on the Machines Tree, keep your left mouse button pressed, drag it to the Machine Queue and release the mouse.



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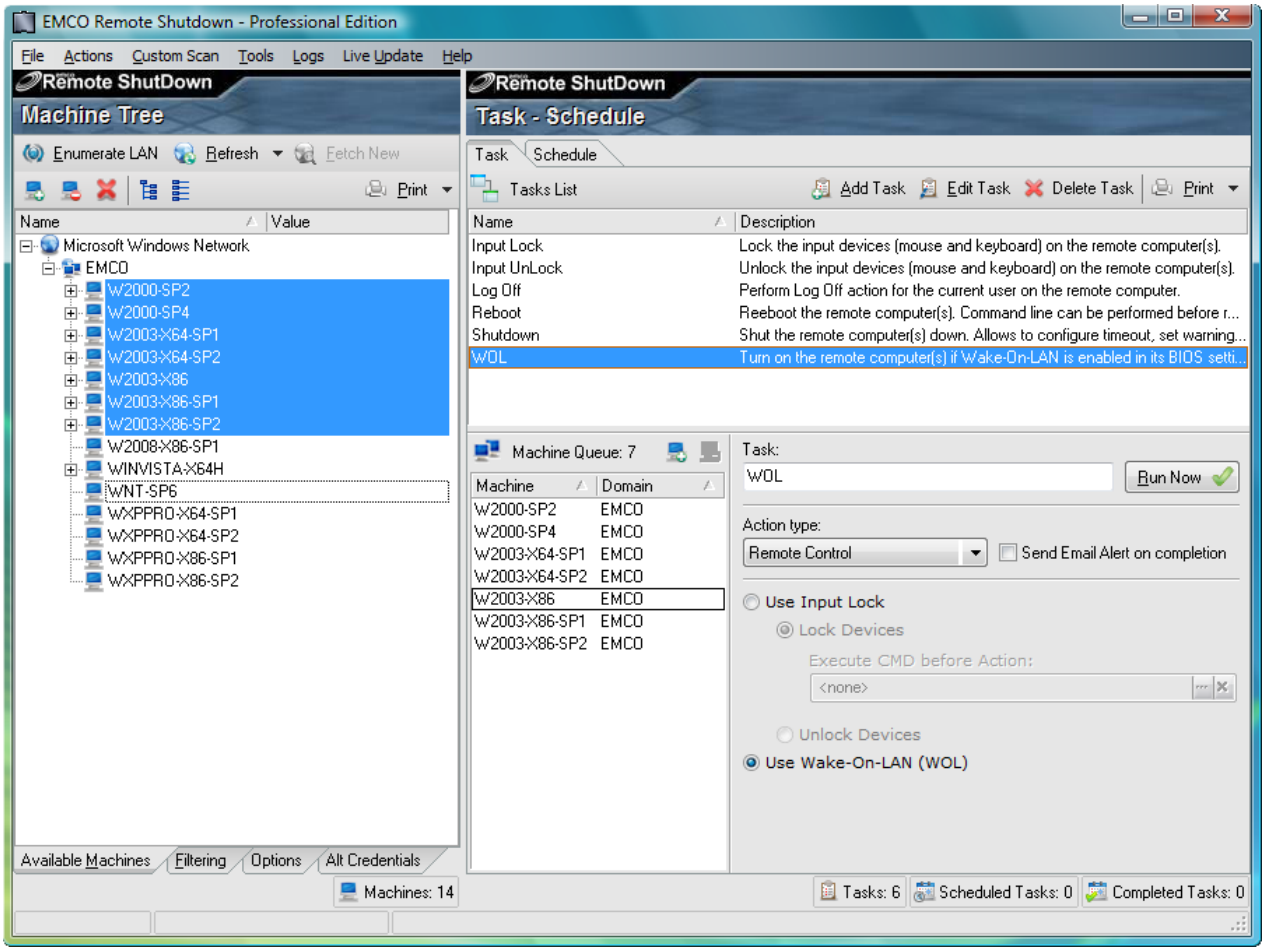
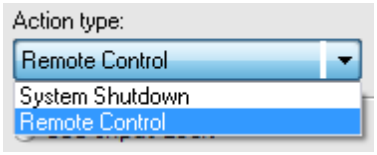
4. The selected Machines will appear in the Machine Queue.



5. Select Remote Control from the action type drop-down list.



6. Select Wake-On-LAN from the required actions radio buttons.

7. You can now click

button to run this action now or schedule it to run automatically on selected time and date.

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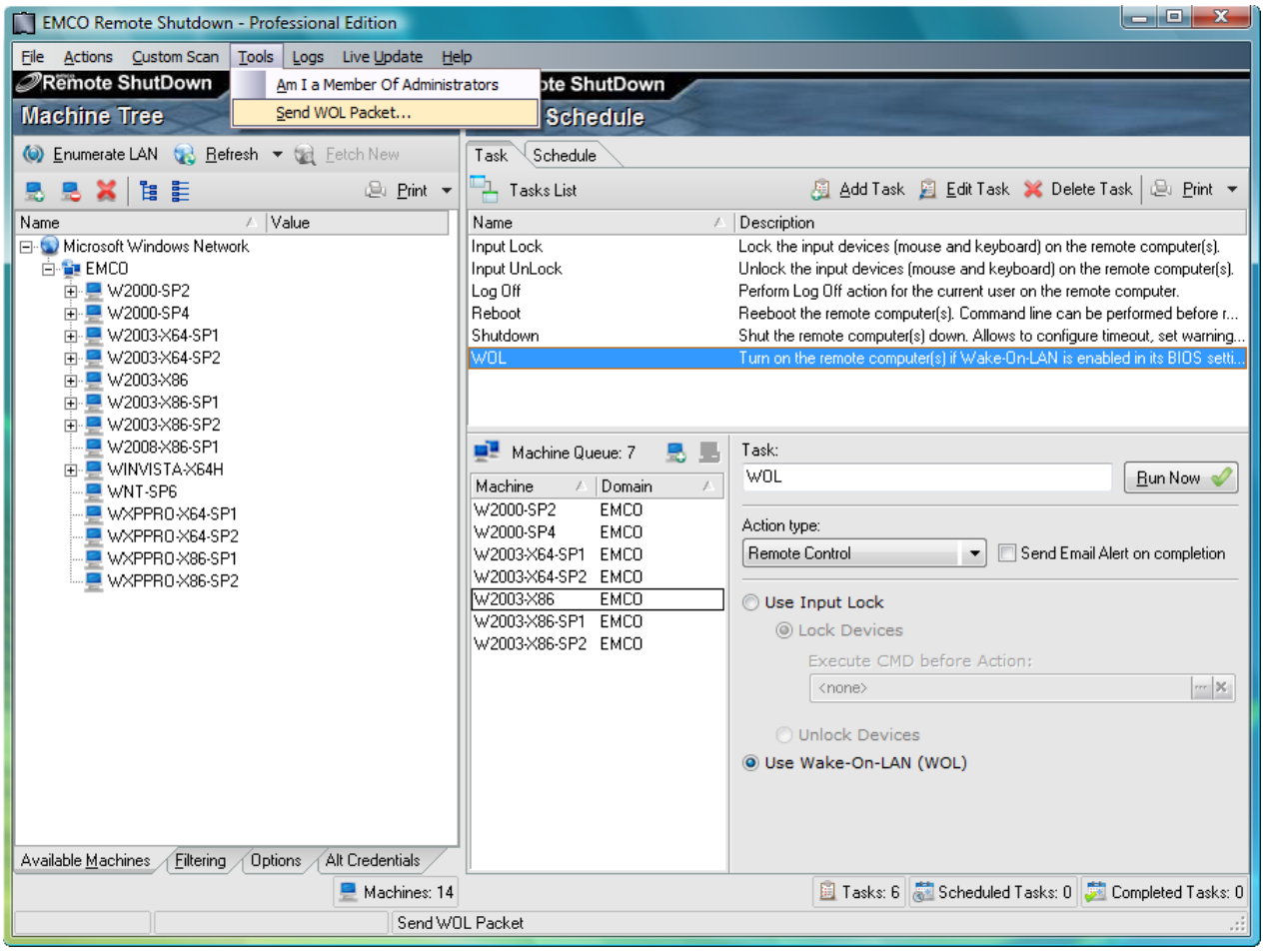
Way II

To send Wake-On-LAN on remote machine perform the following steps:

1. Open Send WOL Packet window using one of the ways below:
   - Click on the Tools > Send WOL Packet option



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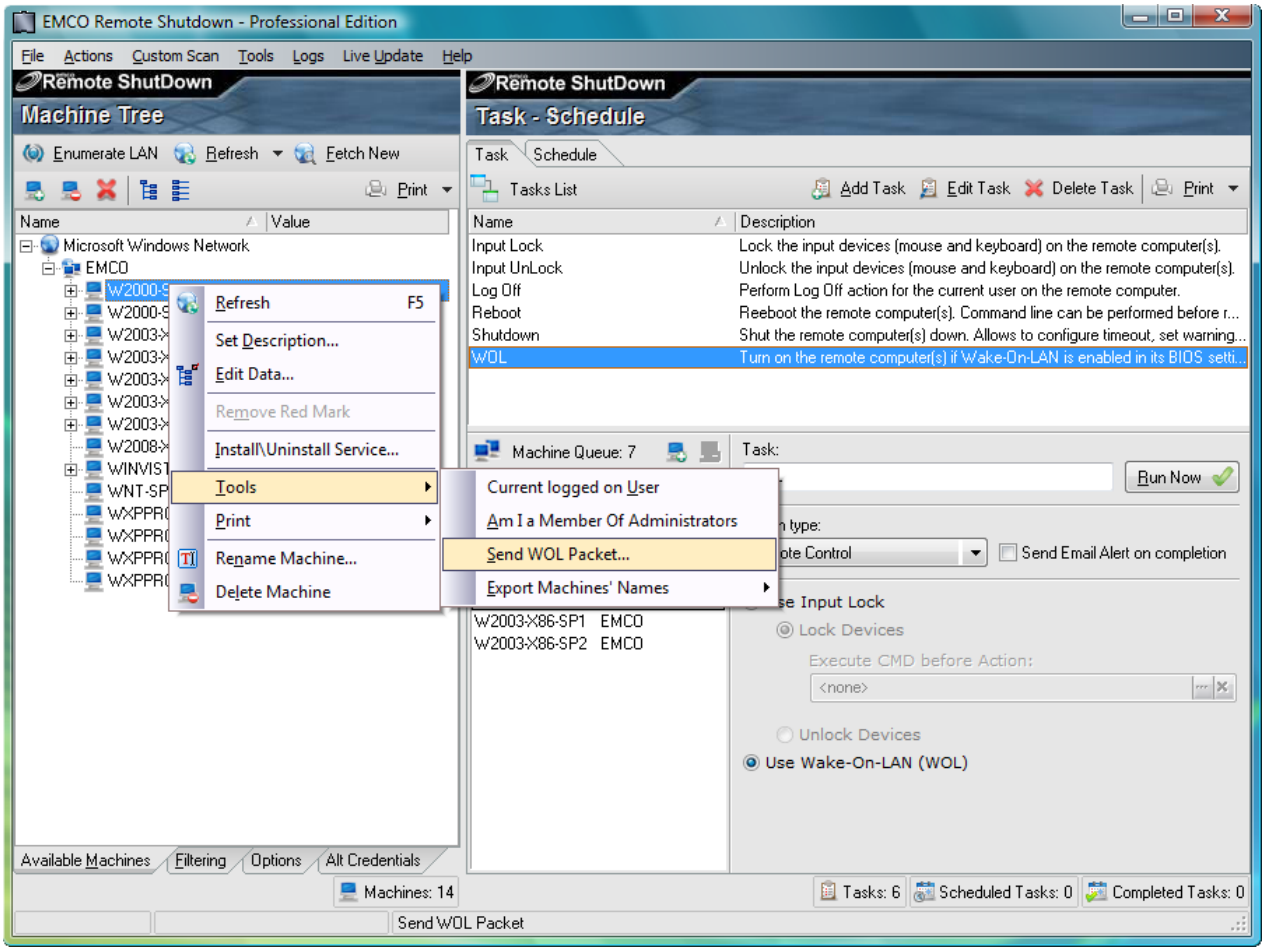
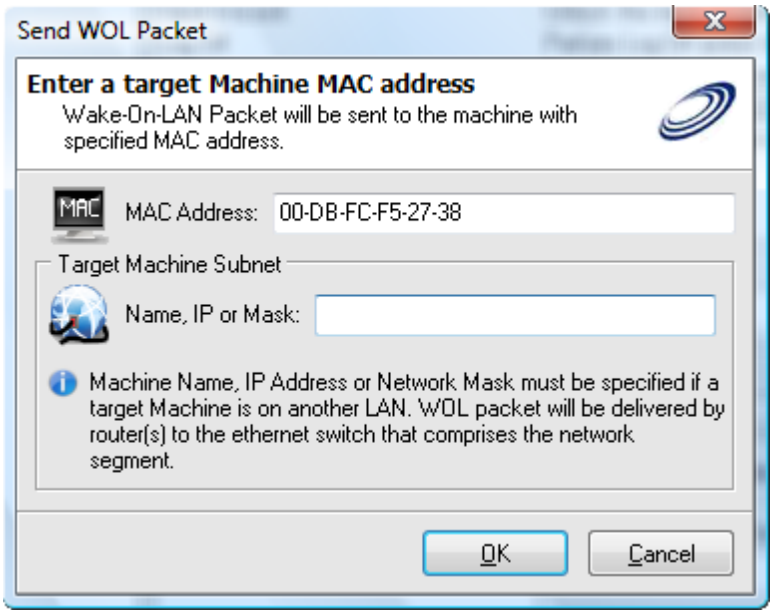
- Select the Tools > Send WOL Packet item from the pop-up menu in Machine Tree.


EMCO Remote Shutdown - Professional Edition
File Actions Custom Scan Tools Logs Live Update Help
Remote ShutDown
Machine Tree
Enumerate LAN Refresh Fetch New
Print
Name Value
Microsoft Windows Network
EMCO
Refresh F5
Set Description...
Edit Data...
Remove Red Mark
Install\Uninstall Service...
Tools
Print
Rename Machine...
Delete Machine
Current logged on User
Am I a Member Of Administrators
Send WOL Packet...
Export Machines' Names
Remote ShutDown
Task - Schedule
Task Schedule
Tasks List
Add Task Edit Task Delete Task Print
Name Description
Input Lock Lock the input devices (mouse and keyboard) on the remote computer(s).
Input UnLock Unlock the input devices (mouse and keyboard) on the remote computer(s).
Log Off Perform Log Off action for the current user on the remote computer.
Reboot Reeboot the remote computer(s). Command line can be performed before r...
Shutdown Shut the remote computer(s) down. Allows to configure timeout, set warning...
WOL Turn on the remote computer(s) if Wake-On-LAN is enabled in its BIOS setti...
Machine Queue: 7
Task:
Run Now
Send Email Alert on completion
W2003-X86-SP1 EMCO
W2003-X86-SP2 EMCO
Lock Devices
Execute CMD before Action:
<none>
Unlock Devices
Use Wake-On-LAN (WOL)
Available Machines Filtering Options Alt Credentials
Machines: 14
Tasks: 6 Scheduled Tasks: 0 Completed Tasks: 0
Send WOL Packet

2. Input MAC address in the MAC Address field.


Send WOL Packet
Enter a target Machine MAC address
Wake-On-LAN Packet will be sent to the machine with specified MAC address.
MAC Address: 00-DB-FC-F5-27-38
Target Machine Subnet
Name, IP or Mask:
Machine Name, IP Address or Network Mask must be specified if a target Machine is on another LAN. WOL packet will be delivered by router(s) to the ethernet switch that comprises the network segment.
OK
Cancel

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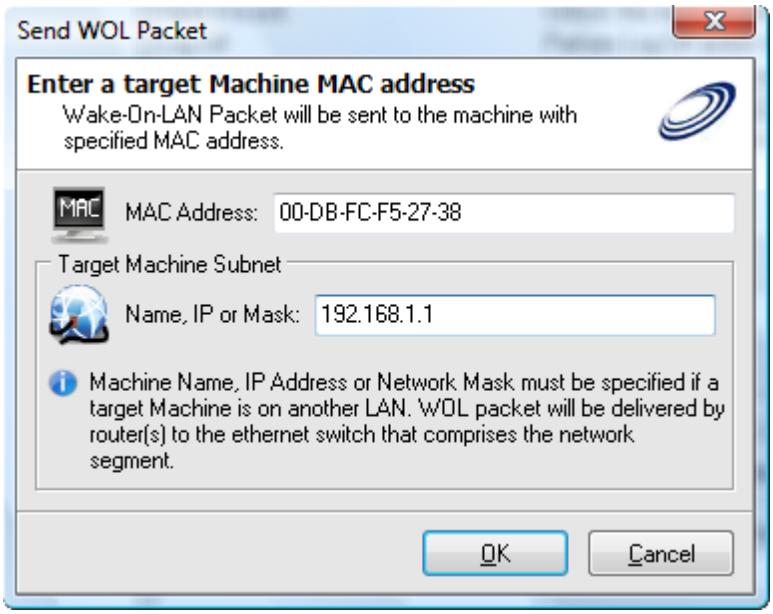
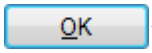
3. Input machine name, IP address or network mask in the Name, IP or Mask field if the target machine belongs to different subnet.


Send WOL Packet
Enter a target Machine MAC address
Wake-On-LAN Packet will be sent to the machine with specified MAC address.
MAC Address: 00-DB-FC-F5-27-38
Target Machine Subnet
Name, IP or Mask: 192.168.1.1
Machine Name, IP Address or Network Mask must be specified if a target Machine is on another LAN. WOL packet will be delivered by router(s) to the ethernet switch that comprises the network segment.
OK
Cancel

4. When the parameters are specified press 

button to proceed.

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